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ABSTRACT

A system and method for measurement and analysis of a sample by absorption spectrophotometry is taught by the present invention. According to various embodiments, the invention utilizes a novel receptacle comprising of at plurality of layers including a transparent layer, a channel layer, and a reflective layer coupled to one another and allowing for fluid communication within and among the layers to allow for illumination by a light source and interrogation and analysis by a light measuring device. Examples of the light source and light measuring devices that could be used with the present invention include reflectance and/or fluorescence spectroscopy and a spectrometer, respectively. Measurement and analysis of a sample is compared to known values of constituents for comparison.